

STATE OF HAWAII  
Department of Land and Natural Resources  
Engineering Division

July 22, 2009

Board of Land and Natural Resources  
State of Hawaii  
Honolulu, Hawaii

**Request Authorization to Select Consultant(s) and Authorize the Chairperson to negotiate and execute agreements with consultant(s) and/or government agencies as necessary to implement Chapter 179D HRS, entitled the Dam and Reservoir Safety Act of 2007  
Funded by the Dam and Reservoir Safety Special Fund**

The Engineering Division desires to select consultant(s) and execute agreements with consultant(s) and/or government agencies for the following projects. Funding for this work will be provided from the Dam and Reservoir Safety Special Fund budget.

**1. Dam Failure Evacuation Plan Development**

Contract with the Pacific Disaster Center, under management by RCUH

To develop dam failure evacuation plans from dam failure models that PDC has already developed. PDC would coordinate this effort with County Civil Defense and emergency response personnel for Kauai, Hawaii and Maui county dams. Evacuation plans will take into account dam failure travel wave times, population density in the areas potentially affected, critical care facilities, critical infrastructure and similar criteria. PDC will individually tailor plans based on comments on how each particular County response personnel would approach potential evacuations. This contract will also provide a contingency to model dams currently unregulated by the program, which appear to be close to the regulatory size limit, and develop evacuation plans for those facilities as well. Budget: \$162,500

**2. Unregulated Dams Inventory Report to the Legislature**

Contract with consultant Oceanit Laboratories, Inc., via a supplemental contract to Contract No. 57779

To develop a report summarizing the findings from their current efforts on developing an inventory of currently unregulated dam and reservoir structures greater than 2-million gallons. This task was mandated by the legislature in Act 262, SLH 2007, "The Hawaii Dam and Reservoir Safety Act of 2007". This report would provide guidance on the impact these unregulated structures have on the public and possible impact on the dam safety regulatory program. The report would provide recommendations on whether or not these structures should have been regulated by the Hawaii Dam Safety Program and if not, identify other possible entities that may have jurisdiction over their safety. An allowance for additional field inspection of identified reservoir facilities will be included in this contract.

Budget: \$120,000

### 3. Update Program Guidelines

Contract with Consultant for review and update the existing dam safety program guidelines, which are currently 15-years old. Several guidelines are to be updated, including the Guidelines for the Design and Construction of Small Embankment Dams and the Guidelines for the Safety Inspection of Dams. The dam safety program guidelines were developed prior to the recent revisions to the Dam and Reservoir Safety Program Act of 2007. The review and update will be to the current "standard of care" and also for consistency with the newly passed legislation.

Budget: \$175,000

### 4. Dam Assessment and Technical Service Fees

Contract with several Consultants for Technical Review of Dam Safety Permits anticipated to be received in this fiscal year. The program anticipates 10 – 15 dam safety permit applications this fiscal year and outside technical reviews are critical for identifying possible deficiencies in proposed dam remediation projects.

Budget: \$80,000

Dam Failure Evacuation Plan Development	\$162,500
Unregulated Dams Inventory Report to the Legislature	\$120,000
Update Program Guidelines	\$175,000
Dam Assessment and Technical Service Fees	\$ 80,000
<b>Total</b>	<b>*\$537,500</b>

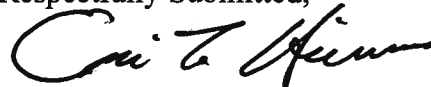
\*Estimated subject to change through final negotiations.

### **RECOMMENDATIONS:**

That the Board of Land and Natural Resources approve the following:

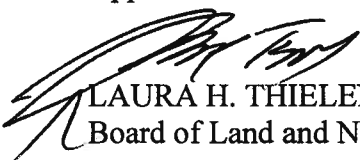
1. Authorize the Chairperson to select consultant(s), and negotiate and sign the necessary documents with those consultant(s) for the aforementioned projects, subject to review and approval by the Attorney General.
2. Request and authorize the retained consultant(s) or government agency and its agents, employees, and consultants, to enter upon private property for the purposes of investigating or conducting directed activities related to the aforementioned projects.
3. Authorize the Chairperson, subject to review and approval by the Attorney General, to enter into supplemental contracts to address unforeseen conditions and to exercise options as provided in contract documents, and to sign the necessary documents to implement the additional work and/or time with the consultant.

Respectfully Submitted,



ERIC T. HIRANO  
Chief Engineer

Approved for Submittal:



LAURA H. THIELEN, Chairperson  
Board of Land and Natural Resources